



**CAUTION**  
This product requires a  
PXI/cPCI Chassis with  
replaceable card guides  
per the Eurocard mech-  
anical specification

## PX412S 4 x 4 Matrix Switch Module

The PX412S provides 16 independent latching DPST switches configured as a 4 x 4 matrix. These two wire switches have maskable interrupts that occur when the requested relay movements have been made. The module also has a FIFO for storing up to eight relay operations. This module is useful when instrument matrix switching is needed in your system.

This unit also features a position for adding one single-wide M-Module.

### Specifications:

#### Inputs:

##### Maximum Voltage (terminal to terminal or chassis) \*\*

DC: 60V / 200V  
AC rms: 48V / 125V  
AC peak: 68V / 175V

##### Maximum Current (non-inductive) Per Switch/Per Module:

DC: 2A / 8A  
AC peak: 2A / 8A

##### Maximum Power Per Switch/Per Module:

DC: 50W / 200W  
AC: 50VA / 200VA

##### DC Characteristics\*\*:

Thermal Offset: <3\_V (typical)  
Contact Resistance: <0.3\_  
Insulation Resistance: 10E8\_

\*\* See manual for conditions

#### AC Characteristics:

Bandwidth (-3dB) : >10 MHz (typ)  
Crosstalk (typical)  
<100 KHz: <-64 dB  
<1 MHz: <-44 dB  
<10 MHz: <-24 dB

##### Closed channel capacitance:

Hi-Lo: <40 pF (typical)  
Hi-Chassis: <60 pF (typical)  
Lo-Chassis: <60 pF (typical)

#### Typical Relay Life at Rated Load:

10E5 operations

#### Time to close or open:

8 ms

#### Connectors:

44 pin DSUB  
(female)

#### Temperature:

Operating: 0°C to 55°C  
Storage: -40°C to 75°C

#### Power:

+5V @ 0.6 A

### CPCI/PXI Compliance

Complies with PCI spec. 2.0 R3.0 and PCI spec 2.2

5V and 3.3V signaling voltage (VIO) supported

5V only power supply

33MHz PCI data bus

Five trigger lines compliant with PXI Specification 2.1

Form Factor: 3U

### Applications

- LF Signal Switching
- Instrument Matrix with Kelvin switching

### Ordering Information

Part Number 11030190-0001

### Additional Information

User Manuals for C&H carriers and this module can be found on our website at [www.chtech.com](http://www.chtech.com).